U.S. 2 CORRIDOR DESCRIPTION

The study area for this plan is from the Wisconsin State line easterly to the west city limits of Wakefield. The next section will provide an overview of the physical characteristics of the US-2 corridor, as well as the traffic and safety issues in the study area. This roadway segment is designated by MDOT as Control Section 27021.

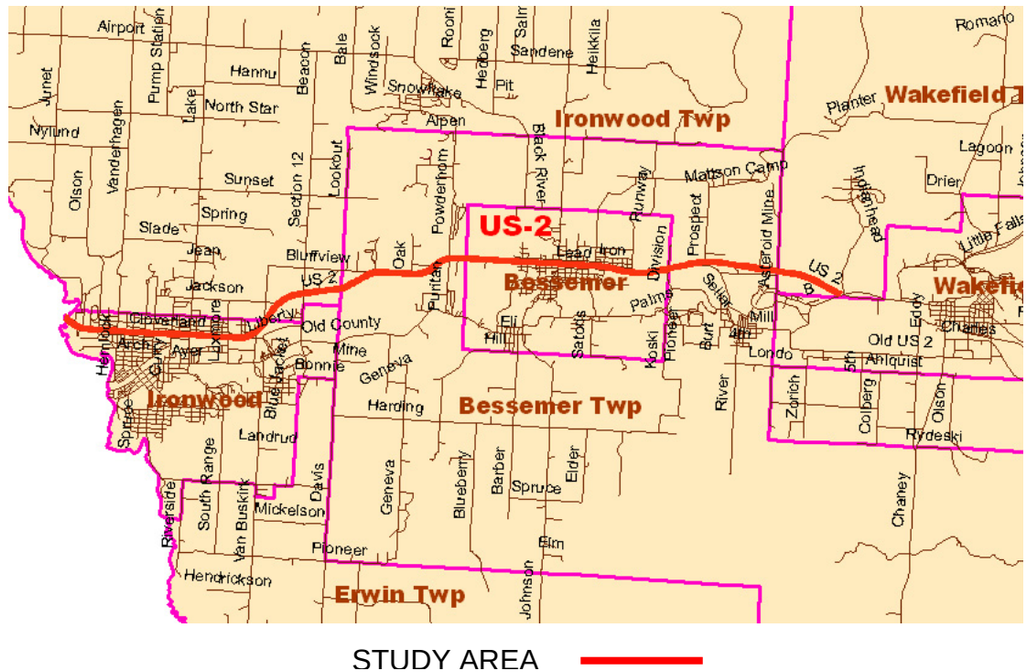
US-2 is classified as a state trunkline. It is also designated as a route on the National Highway System, previously the Primary Commercial Network. It is important to the Upper Peninsula as a through route from Wisconsin (Ironwood area) to the Mackinac Bridge.

Roadway Physical Characteristics

Roadway Geometry

Beginning at the state line (mile point 0.0), the westerly boundary of the study area, US-2 is a divided highway with two lanes in each direction. These lanes are constructed of concrete with full-width paved shoulders. The speed limit in this area is 55 mph. This section is a very short 0.33 miles in length before turning into a four-lane curb and gutter section at Superior Street, where the speed limit is 45 mph. The 35 mph speed limit begins at Walnut Street (mile point 0.64) and carries through to Lake Street (m.p. 1.77) where it increases to 40 mph. The speed increases to 50 mph at Wilson Street (m.p. 2.52), where the roadway becomes a five-lane cross-section to Crestview Road (m.p. 2.89), which is the east city limit of Ironwood and the Ironwood Township Line. The speed limit is decreased through Bessemer to 30 mph to Clayberg Street (m.p. 7.42), where it increases to 40 mph.

Figure 9. Location of Study Area



The four-lane section continues through Bessemer to Old US-2 (m.p. 7.65) where it widens to five-lane again. The speed increases to 55 mph at Tamarack Street (m.p. 7.79).
The five-lane, 55 mph roadway continues to the end of the study area, which is to the west limits of Wakefield Township.

Traffic Volumes

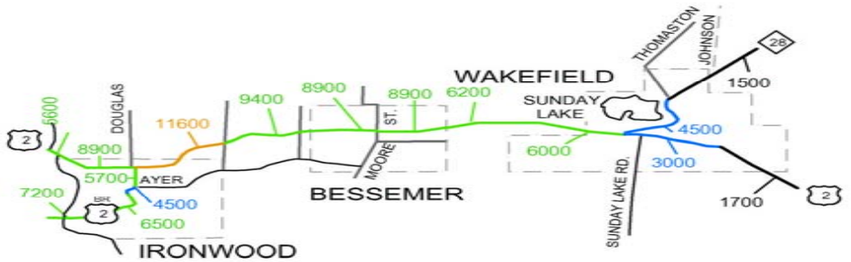
The Average Daily Traffic volumes from 1994 to 2004 are provided by the Michigan Department of Transportation for analysis of the corridor. US-2 in the city of Ironwood has the highest traffic volume in Gogebic County, with more than 11,600 daily vehicles recorded between the US-2 Business Route (Frederick Street) and Roosevelt Street.

As indicated in Figure 2, the highest traffic counts overall are found in the Ironwood business area. The percentage of commercial traffic in this area is approximately 4 percent, or 465 trucks per day. These counts are generally taken during the summer months and corrected for seasonality. It has been discussed that traffic in the city of Ironwood, unlike much of the Upper Peninsula, actually increases during the winter months. There is no substantial data to this effect at the time of this study.

As Figure 2 indicates, the traffic counts in the Ironwood-Wakefield corridor have been decreasing in most cases in the last 10 years. The two exceptions are in the Bessemer Township segment and the Wakefield Township segment, which are up slightly.

The traffic volumes have decreased in most areas in the last 10 years. This decrease could be due to the declining population of the county, reduced tourism rates in the area, or a combination of these and other factors.

Figure 10. US-2 Average Daily Traffic Year 2004



MDOT Average Daily Traffic Counts				
Location	1994	2004	Difference	Percent Change
State Line - Superior Street	7184	5578	-1606	-22.36%
Superior St. - US-2 BR	11980	9126	-2854	-23.82%
US-2 BR - Roosevelt St.	14702	11605	-3097	-21.07%
Roosevelt St. - Country Club Rd	11220	9427	-1793	-15.98%
Country Club - WCL Bessemer	8914	9366	452	5.07%
WCL Bessemer - Moore Rd	9371	8947	-424	-4.52%
Moore Rd - Anvil Hill Rd	9354	8915	-439	-4.69%
Anvil Hill Rd - Blackjack Rd	6966	6152	-813.5	-11.68%
Blackjack Rd - Lake Shore Dr	5940	5957	17	0.29%

Source: MDOT Crash Data

The increase in traffic in the vicinity of Country Club road is consistent with the increase in the number of homes constructed recently. This area is showing growth in the number of homes constructed and the number of businesses along the highway. This traffic is expected to increase further due to the proposed Walmart Supercenter that is currently being planned for the area west of County Club Road and South of US-2.

Accident Data

Crash data from 1994 to 2003 provided by the Michigan Department of Transportation shows a number of locations in which crash concentrations appear. The following table summarizes the number and types of accidents during this period within the study area.

Crash Analysis

Using the data provided by MDOT, the crash data is illustrated in Figures 5-8. In keeping with national statistics, intersection-related crashes represent a large number of crashes reported during the period from 1994 to 2004. Intersection crash data, in general indicates signalized intersections have a high number of right angle and head-on left turn crashes. The study area is no exception. These crashes are also responsible for a higher incidence of the crashes involving injuries. The driver behavior that results in these crashes often involves running the red light[1].

Additionally, a large number of side-swipe accidents and rear-end accidents are recorded in the study area. These types of accidents are inherent to the roadway cross-section due to traffic changing lanes and the frequency of left turns from the inside lane when no left turn lane is available. Many of these types of accidents are caused by excessive speed and inattentive drivers and are unlikely to be affected by Access Management.

Figure 11. US-2 Accident Data 1994 - 2003

Accident Type	Number
Misc	138
Overturn	24
Hit Parked Vehicle	13
Backing	77
Parking	32
Pedestrian	6
Fixed Object	85
Other Object	7
Animal	251
Bicycle	5
Head On	20
Angle Straight	242
Rear End Straight	275
Angle Turn	98
Side Swipe Same Lane	152
Rear End Left Turn	36
Rear End Right Turn	16
Other Drive	15
Angle Drive	53
Rear End Drive	34
Side Swipe Opposite	32
Head On Left Turn	100
Dual Left Turn	2
Dual Right Turn	2

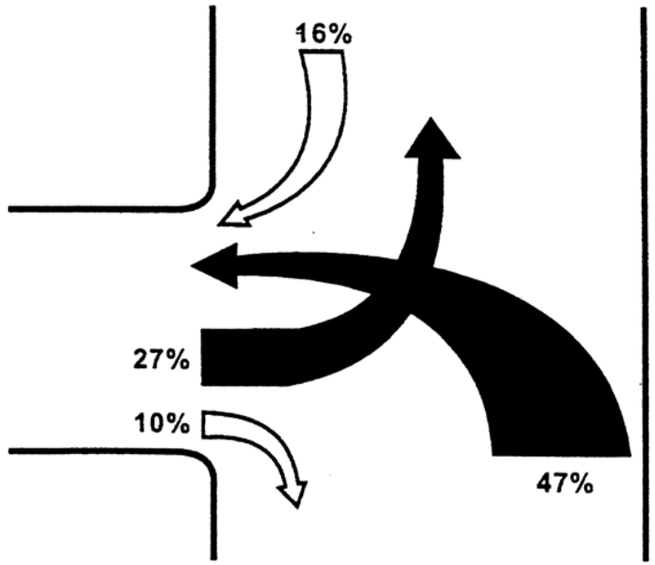
Source: MDOT Crash Data

Access Management can, however affect the numbers of angle crashes due to turning movements. If turning movements can be moved to intersections, the right turning movements which include slowing and turning from the main roadway, and the number of vehicles entering the main roadway, may be minimized eliminating many of these types of accidents.

Specifically, within the study area, the largest number of accidents overall, have occurred in the area between Hemlock Street and Roosevelt Street in Ironwood. A higher volume of crashes occurred at the Douglas Street/US-2 intersection, Lake Avenue Intersection/US-2 Intersection, and Luxmore Street/US-2 Intersection. Curry Road and US-2 has also experienced a series of rear end straight crashes.

The "angle" crashes are those often associated with pulling from drives into the path of an on-coming vehicle are characterized by tow vehicles perpendicular to one another. A total of 393 angle crashes have occurred during the nine-year period studied. These crashes appear at the major intersections of Hemlock Street, Douglas Street, Curry Street and Lake Avenue. A number of "angle straight" crashes are concentrated at the entrance to the shopping mall west of Roosevelt Street.

Figure 12. Driveway Crashes by Movement



Percentage of Driveway Crashes by Movement

Source: National Highway Institute Research Center